



agrovista
seeds



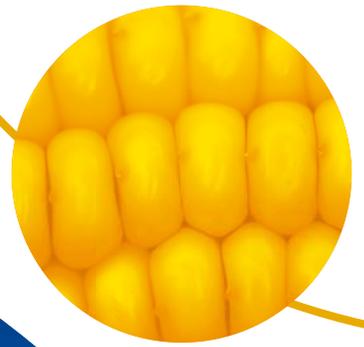
Maize key varieties

2022
season

*growing through
innovation*



agrovista
seeds



Welcome

to the Agrovista 2022 maize brochure

The 2021 season started with cold dry conditions which continued well into May.

Many early drilled crops suffered with young plants losing vigour in the challenging environment. Conversely later drilled crops were out of the ground very quickly and never looked back. Some of these later drilled crops did suffer from a degree of root lodging due to the fact that the stabilising buttress roots barely had chance to fully develop due to the rapid growth of the plant. As ever with the maize crop there are always challenges for growers to overcome whatever the weather throws at us!

New market opportunities are increasingly available to growers with the use of UK produced grain maize in the livestock and pet food sectors continuing to increase. The high energy potential of crimped maize has long been appreciated by livestock farmers and this energy dense feedstock is increasingly being used in the AD sector to compliment the traditional maize and hybrid rye feedstock. Another first for the AD sector is the exciting new technology that enables the capture of carbon dioxide produced during the production of biogas for energy. This new technology is helping to put UK agriculture at the forefront of sustainable farming practice.

The forthcoming introduction of “Environmental Land Management Schemes” will almost certainly put the focus on earlier harvesting, minimising soil contamination of local highways, reducing damage to soil structure, preventing soil erosion and capturing remaining nutrients for use in the following crop. Agrovista have practical solutions to help with all of the aforementioned problems. From having exclusive access to the premium ultra early hybrid KWS Cito, to being at the forefront of undersowing maize crops with the correct species of grass seed to minimise crop competition and soil erosion but maximise nutrient retention. Agrovista can help growers comply with all existing and future environmental legislation.

I hope you enjoy reading about our maize varieties and undersowing solutions and please contact your local Agrovista agronomist if you require further information.



NIGEL WALLEY

National Seed Manager



The complete maize package

Within this brochure you will find our selection of the best maize seed varieties on the market. We can advise on all aspects of maize production including;

Nutrient planning

Comprehensive nutrient plans can be created to maximise the potential of your maize crop.

Soil health analysis

We offer a range of options providing full nutritional, physical and biological soil analysis with detailed reports to give you practical solutions to unlock your soils full potential. For soil health information visit www.agrovista.co.uk/soil-health

Seed selection

Our variety trials and experience in your local area means variety choices are suited to the local conditions.

Maize and cover crop establishment

Seed rate and cultivation advice to obtain optimum establishment and maturity. Agrovista are also market leaders in the advice and supply of undersown cover crops for maize.

Weed and disease control

It is crucial to gain good weed control in maize. Early weed competition has a considerable impact on final yields. Our team of agronomists can advise on herbicide choice and timing.

Pests and disease

Advice on effective IPM strategies to reduce pest damage and preventative fungicide programmes to minimise disease in high risk situations.

Harvest and ensiling

Tailored advice on harvest dates to help maximise dry matter and starch yield. Best practice for ensiling crops to minimise in clamp losses and advice on the correct silage inoculant depending on end use and harvest quality parameters.

Instinct™

Get the most from your nitrogen

Getting the best return from any maize crop is based on two things – choosing the right variety for your circumstances and providing your crop with adequate nutrition.

Nitrogen is core to fulfilling a maize crop's yield potential, but it's a balancing act – too little and the crop's yield will be limited; too much is not only uneconomical, but it has consequences for the environment.

Nitrogen stabilisers, such as Instinct™, slow down the conversion of ammonium to nitrate and keep nitrogen available to crops for longer to optimise yield and quality. Instinct will do three things:

- Keep more nitrogen in the soil for longer
- Maximise the yield potential of the crop
- Reduce nitrogen escape into the environment

Maximise the yield potential of your crop

By keeping more nitrogen in the soil for longer, the chances of a crop fulfilling its potential are increased. There have been many trials across the UK and Europe that look at the impact Instinct has on maize yield; the results of which are shown in the chart on the right.

In the UK, yield increases of more than 10% have been seen, especially if the crop is grown on light soils in high rainfall areas and where total nitrogen rates were moderate.



Instinct®

Optinyte™ Technology

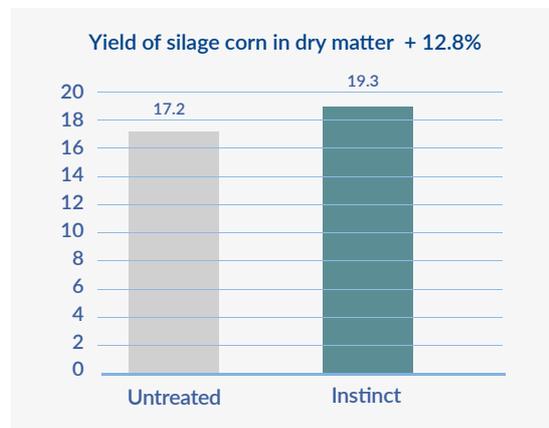
NITROGEN STABILIZER

These trials were conducted using a variety of fertiliser types – urea, UAN, AN, slurry and digestate. If the fertiliser contains ammonium, Instinct stabilises the ammonium, keeping more in the soil for longer, just when the crop needs it.

Instinct optimises nitrogen

Maize is an ideal crop for Instinct as it typically requires more fertiliser than it receives, which means it's extremely important to keep as much nitrogen in the soil as possible, for as long as possible, and it needs more nitrogen later in its life than other crops. Instinct does both – preventing loss of nitrogen, and extending its availability.

Results of 43 trials



USE PLANT PROTECTION PRODUCTS SAFELY. Always read the label and product information before use. For further information including warning phrases and symbols refer to label. Corteva Agriscience UK Limited, CPC2 Capital Park, Fulbourn, Cambridge CB21 5XE. Tel: 01462 457272. ©, ™ Trademarks of Corteva Agriscience and its affiliated companies. All other brand names are trademarks of other manufacturers for which proprietary rights may exist. All manufacturers tradenames and trademarks are duly acknowledged. © 2021 Corteva. Instinct™ contains nitrapyrin (Optinyte™).

MZ28

A foliar applied controlled release nitrogen fertiliser to use on various crops including maize, cereals and oilseed rape

MAIZE NUTRITION

Agronomist Quentin Ham's customer Russell Butler in Reading applied MZ28 to a crop of maize:

"The result was a healthy crop with a strong green colour until harvest that showed no signs of drought or stress. Yield and silage analysis has been extremely good which has helped sell stock out of the clamp."

MZ28 contains nitrogen polymers of variable chain lengths. Because these polymers degrade at different rates, this provides a sustained source of nitrogen to the crop, especially beneficial during the rapid growth phase.

This, combined with an optimised formulation, ensures excellent crop safety.

Formulation: Total nitrogen (N) 28% w/w (300g/l) of which 11.5% ureic nitrogen and 16.5% urea formaldehyde.

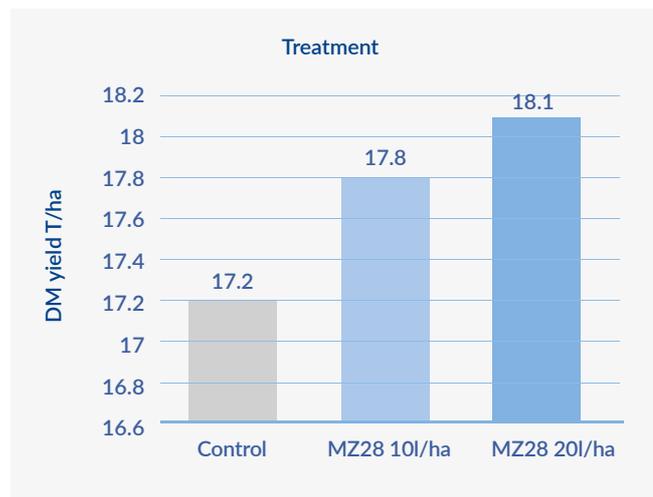
Benefits

MZ28 offers the following benefits:

- **Controlled release** for sustained nutrient provision
- **Boosts chlorophyll content** and dry matter yield
- **Excellent crop safety** – low salt and biuret content
- **Enhanced formulation** to minimise risk of volatilisation



Effect of MZ28 on dry matter yield in forage maize



TAKE CONTROL

Reduce the carbon footprint on your farm

Maize undersowing mixtures

Key benefits

- Reduce nitrate leaching
- Potential for better digestate utilisation
- Improves soil structure
- Helps to reduce soil erosion
- Increase soil organic matter levels
- Potential for winter livestock grazing

Concerns around the environmental impact of growing a maize crop need to be taken seriously and treated as a matter of priority.

Future environmental legislation may well require that maize stubbles are protected from soil erosion and nutrient leaching by utilising cover crops. Establishing a cover crop after maize has been harvested, especially in a late season where weather conditions have deteriorated is a significant challenge.

Undersowing the maize crop with a grass seed mixture designed specifically for that purpose has proved to be successful when done correctly. It is imperative to sow at the right time with the right species so the growing crop isn't affected.

TechniSward **Soilmax**

At sowing



45% Fojtan	Tall fescue plus
55% Tower	Tall fescue

- Specifically designed to being drilled at the same time as the maize crop (inter-row)
- The slow growing tall fescue and tall fescue plus helps to suppress weed emergence without competing with the maize
- As the grasses mature the root mass develops, helping retention of any residual nutrients which are left in the soil post-harvest
- The deep rooting grass species help to improve soil structure
- Sow at 3 to 5kg/acre (7.5–12.5kg/ha)

TechniSward **Enviromax**

4-6 leaf stage



70% Alfonso	Tetraploid late perennial ryegrass
30% Fojtan	Tall fescue plus

- An under-sown mix which is more suited to be sown inter-row once the maize has established and is at the 4-6 leaf stage
- The inclusion of perennial ryegrass helps to ensure the quicker and more reliable establishment needed to survive in the growing maize crop
- It is important that the grass has established before the maize canopy fully develops
- Excellent ground cover post-harvest with a fibrous root system for soil stabilisation
- Capable of providing high quality winter grazing
- Sow at 3 to 5kg/acre (7.5–12.5kg/ha)

Selecting a silage inoculant



Use this to help you to select the correct silage inoculant for your farm. Or for further guidance, contact your local Agrovista agronomist.

Forage maize 30-35% DM

Crimped maize grain

11B91

Specifically designed for preserving crimped maize grain

Improved aerobic stability and reduced fermentation losses

Improved animal performance

For high performing dairy and beef enterprises where farmers are seeking to optimise production from forage

11C33 RR

Improved aerobic stability
Improved animal performance through more efficient fermentation

11CFT

Improved aerobic stability
Enzymes help lift lignin from cell walls increasing digestibility
Increase in milk yields of up to 40 litres per tonne

Extreme heating challenge

For use where forage maize is prone to heating, such as slow feed-out, lack of compaction, long chop length, summer feed-out and higher DM contents

11A44

Improved aerobic stability
Reduction in yeasts and moulds

Anaerobic digestion

For treating forage maize for use in anaerobic digesters

11CH4

Faster and more efficient fibre digestibility
8% increase in methane yield
Improved aerobic stability

Maize varieties

Key to icons

The icons that appear alongside the variety description indicate potential use.



Forage maize



Maize grown under plastic film using the SAMCO System



Energy maize



Grain maize



Ultra-early maturity

ULTRA-EARLY MATURITY

KWS Cito



KWS Cito is the earliest variety in the KWS portfolio and is a first choice variety on both the NIAB BSPB favourable and less favourable descriptive lists

- Cito boasts the highest levels of starch, ME and cell wall digestibility of any of the ultra early competitors and remains the best option for those looking for early harvest and maximum feed value.
- Cito consistently produces very large mature cobs and is well proven over a range of soil types and geographical areas.
- With more focus being given to the environmental aspects of growing maize, Cito offers the opportunity to grow a very energy dense crop and be able to harvest early minimising soil damage and road contamination.



CASE STUDY

Variety:
KWS Cito

Grower:
David Exwood

Location:
Horsham,
West Sussex

Usage:
Forage

Cito fits the bill

“Cito fits the bill,” according to Mr Exwood, who has grown the variety to feed his beef cattle for the past three years. It is the only variety sown this year on the mixed unit, where maize is slotted into the arable rotation.

“Cito has a number of positive qualities,” he says. “Its most important feature is its consistently high starch levels. Another benefit is that it permits an early harvest. The crop is usually cut in mid-September, which enables us to hit the optimum window for a following wheat crop. Cito has proved to be a reliable performer.”

“The consistently high starch yields from the Cito maize silage produce excellent daily live weight gains, allowing us to finish cattle to a very tight specification and delivering the best returns.”

CASE STUDY

Variety:
KWS Cito

Grower:
Andrew Sutton

Location:
Cottage Farm, Hurley,
Warwickshire

Usage:
Forage



Cito is my insurance policy

Maize silage is a key ration ingredient for Andrew Sutton's noted 'Hurcott' Holstein herd and Cito is being grown for a second season. Some 45 acres were sown at Cottage as part of the 100 acre total maize area. A TMR is fed at a rate of 60kgs/head, with maize silage included at a rate of 25kgs for the 195-cow herd.

"The maize really has to perform in order to justify growing it and Cito does the job," says Mr Sutton. "It has to provide tonnage because the acreage is tight, and it yielded well last year at an average 17-18 tonnes/acre. The analysis showed 34% DM, with 32.9% starch and an ME of 11.2mg/kg."

"Cito requires only a short season to reach maturity. The maize is sown after two or three-year grass leys or a Westerwolds ryegrass catch crop, with one cut of grass silage taken before it is planted. The maize is then ready to harvest in time to sow a following grass crop or a cereal."

"The soil at Cottage Farm is predominantly a sandy-silt loam, with some red clay in places, and Cito will cope well no matter where it is sown, comments Mr Sutton. The maize silage is a key ration ingredient for the award-winning herd, which is milked three times a day and averages just under 12,000kgs. The rolling average for butterfat is 4.1%, with protein at 3.2%."



Early maturity

P7326



P7326 is now firmly established as a consistent performer over a range of soil types and geographical locations

- It has been the biggest selling variety in the UK for the past two years and benefits from early maturity and robust eyespot and fusarium tolerance.
- For those looking for consistent yield and feed quality allied with good standing ability and early maturity, P7326 is the perfect compromise.

LiRoyal



LiRoyal is a first choice variety on both the favourable and less favourable NIAB BSPB descriptive lists for 2022

- Maturity is within the FAO 180 range and therefore suitable for growing across the vast majority of the UK maize growing area.
- LiRoyal offers the perfect balance of yield, quality and maturity to suit a wide range of applications.
- Capable of producing over 18 tonnes of dry matter and well in excess of 6 tonnes of starch per hectare, LiRoyal is the ideal choice for high performing livestock systems or as the early variety in a balanced energy maize portfolio.

SY Silverbull



SY Silverbull is a new variety from Syngenta currently in national list trials

- Looking slightly earlier to harvest than SY Nordicstar and with good levels of dry matter and starch yields, SY Silverbull looks set to become a useful addition to the early forage and energy maize marketplace.
- For growers looking for new genetics at a sensible price point this is certainly a variety worthy of consideration.
- Limited seed availability for 2022.

Medium maturity

SY Nordicstar



SY Nordicstar from Syngenta continues to enjoy first choice variety status on the latest NIAB BSPB descriptive list

- High yields of starch and ME coupled with excellent cell wall digestibility create a truly versatile variety which has enjoyed considerable success in both forage and energy maize situations.
- SY Nordicstar has class leading eyespot tolerance and exceptional resistance to fusarium, a vital factor when drilling wheat after maize.
- As well as being ideally suited to the forage sector SY Nordicstar is perfect as the early variety in large scale energy maize situations.

Emblem



Emblem is a high yielding, high feed value LGAN variety from Limagrain offering top quality forage at an affordable price point

- Emblem has an excellent quality profile making it the perfect variety for those looking to maximise milk or beef production.
- Enjoying high yields of starch, cell wall digestibility and ME, Emblem can be grown in most mainstream maize areas and is a very cost effective option for those looking to maintain quality without increasing costs.

P7034



P7034 has firmly established itself as a leading mid maturity hybrid in both forage and AD situations

- Utilising high yielding “Dent” genetics in an earlier to harvest hybrid enables the variety to be grown in all but the most marginal of sites.
- P7034 is a very robust plant type with exceptional eyespot and fusarium tolerance which also makes it suitable for grain maize production.
- The genetic make up of P7034 makes it ideal for those growers looking to feed maize soon after ensiling without compromising starch availability.

SY Actual



SY Actual features on the 2022 NIAB BSPB descriptive list and benefits from exceptionally high starch and ME levels

- Suitable for both forage and energy maize production with very high dry matter yields for a medium maturity hybrid.
- Prefers good maize growing ground but has performed well when grown under plastic film in more marginal areas.
- SY Actual is a robust plant type with outstanding disease resistance and standing power making the variety suitable for the growing grain maize market.

Mid to late maturity

LG31205



LG31205 is a new variety from Limagrains suitable for forage, grain and energy use and features on the 2022 NIAB BSPB descriptive list

- Joint highest dry matter yield in Limagrains own trials combined with the highest energy yield (ME) and cell wall digestibility figures.
- Producing similar dry matter yields to LG30248 but being considerably earlier to harvest LG31205 is a significant step forward in maize plant breeding.
- Maturity is within the FAO 190-200 range making LG31205 suitable for growing on favourable sites with good soils.
- Being a single cross hybrid ensures reliable and consistent performance and LG31205 is capable of producing class leading yields of starch, ME and drymatter to satisfy the most demanding of growers.

Cranberri CS



Cranberri is the ideal mid maturity hybrid for the energy sector and more favourable forage maize sites

- Featuring on the NIAB BSPB first choice favourable sites list Cranberri CS has gained a loyal following with both energy and forage maize growers.
- Cranberri has the potential of reaching yields of 19 tonnes dry matter per hectare making the variety ideal for those looking to maximise yield at a very competitive price point.

ES Palladium



ES Palladium is a large impressive hybrid which benefits from very high dry matter yield, high levels of starch and ME and good standing power

- High cell wall digestibility completes the quality profile of ES Palladium.
- Cob set is uniform on a very robust stem which gives exceptional standing power and plant stability especially on exposed sites.
- Producing over 19 tonnes per hectare dry matter yield on favourable sites makes ES Palladium the ideal compromise between yield and maturity.



Mid to late maturity

SY Karthoun



SY Karthoun features on the 2022 NIAB BSPB descriptive list and has become a well established variety in the energy maize sector

- Agrovista have many years experience with SY Karthoun and it has found favour in the mid maturity slot with an increasing number of energy maize growers.
- Ideal for spreading the harvest window where large areas of maize need to be ensiled.
- SY Karthoun produces very high dry matter yields and performs well on a range of soil types.

P7948



P7948 is another versatile hybrid from Pioneer which is suitable for a number of different end user markets

- P7948 is a mid to late maturity hybrid offering exceptional yield and quality.
- Good standing power is a major benefit for the grain maize market where P7948 has proved itself to have one of the highest grain yields of any variety grown in the UK.
- The energy maize market is also ideally suited to P7948 where the combination of consistently reliable maturity and high dry matter yield will appeal to those growing maize on more favourable sites.

Gamecover maize

High Flyer

High Flyer is a mid to late maturity maize variety chosen for its balance between good cob formation and robust standing power

- Seed will be treated with Korit bird repellent to ensure the best possible establishment of the crop.





*Speak to your local
Agrovista agronomist
about our market-leading
deferred payment
scheme for maize seed*



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